

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference PH-1812-PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP03/05956	International filing date (day/month/year) 13 May 2003 (13.05.03)	Priority date (day/month/year) 28 June 2002 (28.06.02)
International Patent Classification (IPC) or national classification and IPC C12N 15/09, 1/19, C12P 21/02		
Applicant NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 13 May 2003 (13.05.03)	Date of completion of this report 22 October 2003 (22.10.2003)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/05956

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☐ the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

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## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application.
- ☒ claims Nos. Part of 3-4 and 1-2, 15-12

because:

- ☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

- ☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

- ☒ no international search report has been established for said claims Nos. Part of 3-4 and 1-2, 15-12.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the standard.
- ☐ the computer readable form has not been furnished or does not comply with the standard.

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.1

An international search report was not created for the portions of claims 1-2 and 5-12 other than the portions that pertain to a DNA fragment that occurs in the upstream region of gene no. 86 (YFL014W); therefore, the novelty, inventive step and industrial applicability of the other inventions were not examined.

(The technical feature common to claims 1 and 2 and the portions of claims 5-12 that pertain to claims 1-2 is the "DNA fragment occurring in the upstream regions of the genes from *Saccharomyces cerevisiae*, which functions as a cold-inducible promoter." However, this feature is well known as disclosed in the document JP 8-9977 A; therefore, the "DNA fragment occurring in the upstream regions of the genes from *Saccharomyces cerevisiae*, which functions as a cold-inducible promoter" cannot be said to be a special technical feature. Consequently, claims 1-2 and the portions of claims 5-12 that pertain to claims 1-2 cannot be said to exhibit a technical relationship that involves a special technical feature, and thus cannot be considered to be so linked as to form a single general inventive concept.)

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	9-12	YES
	Claims	1-2, 5-8	NO
Inventive step (IS)	Claims	9-12	YES
	Claims	1-2, 5-8	NO
Industrial applicability (IA)	Claims	1-2, 5-12	YES
	Claims		NO

## 2. Citations and explanations

Document 1: Mol. Cell. Biol., 1995, Vol. 15, No. 11, pages  
6232-6245

Document 2: Microbiology, 2000, Vol. 146, No. 2, pages  
367-375

## Claims 1-2 and 5-8

The inventions that are set forth in claims 1-2 and 5-8 lack novelty in the light of document 1 or document 2 cited in the international search report.

Documents 1 and 2 disclose the promoter of the HSP12 gene from *Saccharomyces cerevisiae*.

Consequently, the inventions that are set forth in claims 1-2 and 5-8 cannot be differentiated from the inventions that are disclosed in document 1 or document 2.

## Claims 9-12

The inventions that are set forth in claims 9-12 are novel and involve an inventive step in relation to documents 1-2 cited in the international search report.

The feature wherein the promoter of the HSP12 gene from *Saccharomyces cerevisiae* is induced under low temperature conditions is not disclosed in any of the documents, and is not considered to be obvious to a person skilled in the art of this technical field.